WHAT IS CLAIMED IS:

1. A device comprising:

a bus;

a plurality of first line cards connected to the bus, each first line card having a plurality of local ports, each local port being connectable to a local segment that is connected to a customer device that has an IP address; and

a second line card connected to the bus, the second line card having a network port that is connectable to a network segment, the network port having an IP address and a subnet mask, the subnet mask including a range that is sufficient to provide a predetermined number of IP addresses.

2. The device of claim 1 wherein none of the local ports has an IP address.

3. The device of claim 2 wherein when the second line card receives messages from the network segment, the second line card forwards messages that match the IP address and subnet mask of the second line card to the first line cards.

4. The device of claim 3 wherein each line card maintains a table that indicates each of the IP addresses that are associated with each port of each line card.

5. The device of claim 4 wherein when a first line card is connected to a customer device with a device IP address, the first line card identifies messages on the bus that are directed to the device IP

address, and forwards the messages to the local port that is associated with the device IP address.

6. The device of claim 4 wherein when a first line card is connected to a customer device with a device IP address, the first line card receives messages from the customer device, and forwards the messages to the second line card via the bus.

7. The device of claim 1 wherein the first line cards include xDSL line cards.

8. A method of forwarding data packets from a central office device to a number of customers, the central office device having:

a bus; and

a plurality of first line cards connected to the bus, each first line card having a plurality of local ports, each local port being connectable to a local segment that is connected to a customer device that has a customer IP address;

the method comprising the steps of:

receiving messages that have a central office IP address and a subnet mask, the central office IP address and subnet mask having the customer IP address;

determining a first line card to receive a received message based on the customer IP address; and

forwarding the received message to the first line card via the bus.

9. The method of claim 8 wherein the central office device includes a second line card connected to the bus, the second line card having a network port that is connectable to a network segment, the network port having the central office IP address and the subnet mask.

10. The method of claim 8 wherein none of the local ports has an IP address.

11. The method of claim 9 wherein each line card maintains a table that indicates each of the IP addresses that are associated with each port of each line card.

12. The method of claim 8 wherein when a first line card is connected to a customer device, the first line card identifies messages on the bus that are directed to the customer IP address, and forwards the messages to the local port that is associated with the customer IP address.